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10/823,504

04/13/2004

Frank van Diggelen

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EXAMINER

LEE, JUSTIN YE

ART UNIT

PAPER NUMBER

2617

DATE MAILED: 04/21/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/823,504

Applicant(s)

DIGGELEN ET AL.

Examiner

Justin Y. Lee

Art Unit

2617

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-14 and 18-26 is/are rejected.
- 7) ☒ Claim(s) 15-17 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

1. The Art Unit location of your application in the USPTO has changed. To aid in correlating any papers for this application, all further correspondence regarding this application should be directed to Art Unit 2617.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-9 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jijina et al. (US 2004/0203569 A1) in view of Shamoto et al. (US 2003/0045304 A1).

Consider claim 1. Jijina et al. disclose receiving a request for a position to be computed (paragraph 41, receiving a request occurs when an emergency call is placed);

calculating a plurality of positions (paragraph 39);

caching at least one of said plurality of positions in a position cache (paragraph 39, the received position data is stored in a buffer 408);

deriving accuracy data with respect to at least one of said plurality of positions (paragraph 39, GPS receiver 404 provides the current position and GPS quality parameter of the telematics unit 402); and

identifying a best position stored in said position cache in response to said accuracy data (paragraph 40, monitor 420 selects the position with highest quality parameters and transmitted to the service management system 116).

Jijina et al. do not disclose receiving a request for a position to be computed within a predefined period of time; calculating a plurality of positions within said predefined period of time.

Shamoto et al. further disclose receiving a request for a position to be computed within a predefined period of time; and calculating a plurality of positions within said predefined period of time (paragraph 29, 30 and Fig. 3, plurality of positions are searched during the time period).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize the teachings of Shamoto et al. into the teachings of Jijina et al. for the purposes of prevent the user from having to wait a long time (paragraph 11).

Consider claim 2. Shamoto et al. further disclose said best position is identified before expiration of said predefined period of time (paragraph 30, the appropriateness of GPS search result is found before the expiration of the time period).

Consider claim 3. Shamoto et al. further disclose said best position is a last calculated position of said plurality of positions with respect to expiration of said predefined period of time (paragraph 30, the appropriateness of GPS search result is a search result calculated during the time period).

Consider claim 4. Jijina et al. also disclose storing at least a portion of said accuracy data in said position cache (paragraph 39, GPS quality data received from the GPS receiver 404 is stored in the buffer 408).

Consider claim 5. Jijina et al. also disclose said deriving step comprises: computing an indicia of accuracy for each position stored in said position cache; and storing each said computed indicia of accuracy in said position cache (paragraph 38 and 39).

Consider claim 6. Jijina et al. also disclose each said indicia of accuracy is derived from at least one of a covariance matrix of a Kalman filter, pseudorange residual data, and dilution of precision data (paragraph 38 and 42, the quality is derived from dilution of precision or any other GPS quality parameters).

Consider claim 7. Jijina et al. also disclose sending said best position and a stored indicia of accuracy associated with said best position to a server in communication with said mobile device (paragraph 40, the position with the best quality indication is sent to the service management subsystem 116).

Consider claim 8. Jijina et al. and Shamoto et al. together disclose comparing a stored indicia of accuracy associated with said best position to a threshold (Shamoto, paragraph 29, the quality is checked to determine the appropriateness. Even though Shamoto et al. do not disclose what the quality is checked against, but the quality must be checked against some threshold);

sending said best position to a server in communication with said mobile device in response to said stored indicia of accuracy associated with said best position

satisfying said threshold (Jijina et al., paragraph 40, the highest quality position data is sent to service management subsystem 116); and

sending an indication of no accurate position to said server in response to said stored indicia of accuracy associated with said best position failing said threshold (Shamoto et al., paragraph 36, if the search results are not proper and the time expires the mobile phone 1 sends the received data to server 6. The received data can easily be changed to just an indication of no accurate position is determined when the design does not wish to provide inaccurate data).

Consider claim 9. Jijina et al. also disclose sending said best position to a server in communication with said mobile device (paragraph 40).

Consider claim 11. Jijina et al. also disclose said request is generated by said mobile device (paragraph 41).

4. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Jijina et al. (US 2004/0203569 A1) in view of Shamoto et al. (US 2003/0045304 A1) as applied to claim 1 and further in view of Bloebaum et al. (US 6,433,735 B1).

Consider claim 10. Jijina et al. and Shamoto et al. do not disclose said request is received from a server in communication with said mobile device.

Bloebaum et al. further disclose said request is received from a server in communication with said mobile device (col. 7, lines 45-50 and Fig. 7).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize the teachings of Bloebaum et al. into the

teachings of Jijina et al. and Shamoto et al. for the purposes of determining the geographic location mobile terminal (col. 1, lines 36-60).

5. Claims 12-14, 18-20, and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jijina et al. (US 2004/0203569 A1) in view of Shamoto et al. (US 2003/0045304 A1) and further in view of Takeuchi (US 2003/0050077 A1).

Consider claim 12. Jijina et al. disclose receiving a request for a position to be computed (paragraph 41);

computing a best position and a corresponding indicia of accuracy (paragraph 40).

retaining said best position in a cache (paragraph 39, the received GPS data is stored in a buffer 408, best GPS data is included in the stored GPS data).

Jijina et al. do not disclose receiving a request for a position to be computed within a predefined period of time; computing a best position and a corresponding indicia of accuracy within said predefined period of time; and comparing said indicia of accuracy to a threshold.

Shamoto et al. further disclose receiving a request for a position to be computed within a predefined period of time (paragraph 29, 30 and Fig. 3);

computing a best position and a corresponding indicia of accuracy within said predefined period of time (paragraph 29);

comparing said indicia of accuracy to a threshold (paragraph 29).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize the teachings of Shamoto et al. into the teachings

of Jijina et al. for the purposes of prevent the user from having to wait a long time (paragraph 11).

Jijina et al. and Shamoto et al. together do no disclose retaining said best position in a cache in response to said indicia of accuracy satisfying said threshold.

Takeuchi et al. further disclose retaining said best position in a cache in response to said indicia of accuracy satisfying said threshold (paragraph 6, mobile station compares the uncertain information against a threshold and stores the position information if the uncertain information is more than the threshold).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize the teachings of Takeuchi et al. into the teachings of Jijina et al. and Shamoto et al. for the purposes of finding the position of the mobile communication terminal device (paragraph 2).

Consider claim 13. Jijina et al. also disclose sending said best position to a server in communication with said mobile device (paragraph 40).

Consider claim 14. Jijina et al. and Shamoto et al. together disclose identifying a previously retained position in said cache having a best accuracy in response to said indicia of accuracy failing said threshold (Jijina et al., paragraph 40, selecting the best quality position parameter. Shamoto et al., paragraph 36, retrieve previously retained position data in response to no proper data is found in a predetermined time);

sending said previously retained position to a server in communication with said mobile device (Shamoto et al. paragraph 36, the position data is sent to position data server 6).

Consider claim 18. Jijina et al. and Shamoto et al. together disclose calculating a plurality of positions within said predefined period of time (Shamoto et al., paragraph 29, 30, and Fig. 3);

 caching at least one of said plurality of positions (Jijina et al., paragraph 39);

 deriving an indicia of accuracy with respect to at least one of said plurality of positions (Jijina et al., paragraph 39); and

 identifying said best position and said corresponding indicia of accuracy (Jijina et al., paragraph 40).

Consider claim 19. Shamoto et al. further disclose said best position is identified before expiration of said predefined period of time (paragraph 30, the appropriateness of GPS search result is found before the expiration of the time period).

Consider claim 20. Shamoto et al. further disclose said best position is a last calculated position of said plurality of positions with respect to expiration of said predefined period of time (paragraph 30).

Consider claim 22. Jijina et al. also disclose said request is generated by said mobile device (paragraph 41).

6. Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over Jijina et al. (US 2004/0203569 A1) in view of Shamoto et al. (US 2003/0045304 A1) and Takeuchi et al. (US 2003/0050077 A1) as applied to claim 12 and further in view of Bloebaum et al. (US 6,433,735 B1).

Consider claim 21. Jijina et al., Shamoto et al., and Takeuchi et al. do not disclose said request is received from a server in communication with said mobile device (col. 7, lines 45-50 and Fig. 7).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize the teachings of Bloebaum et al. into the teachings of Jijina et al., Shamoto et al., and Takeuchi et al. for the purposes of determining the geographic location mobile terminal (col. 1, lines 36-60).

7. Claims 23-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jijina et al. (US 2004/0203569 A1) in view of Shamoto et al. (US 2003/0045304 A1) and further in view of Woodard et al. (US 2005/0200492 A1).

Consider claim 23. Jijina et al. disclose an GPS receiver for processing satellite signals (paragraph 39 and Fig. 4);

a processor for calculating, from the processed satellite signals, a plurality of positions and for calculating accuracy data associated with said plurality of positions (paragraph 39, GPS receiver 404 includes a processor that provides the current position and GPS quality parameter); and

a position cache, coupled to the processor, for storing at least one of said plurality of positions (paragraph 39, and Fig. 4).

Jijina et al. do not disclose a processor for calculating, from the processed satellite signals, a plurality of positions within a predetermined time, and for calculating accuracy data associated with said plurality of positions.

Shamoto et al. further disclose a processor for calculating, from the processed satellite signals, a plurality of positions within a predetermined time (paragraph 36 and Fig. 3, calculating a plurality of position within a predetermined time).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize the teachings of Shamoto et al. into the teachings of Jijina et al. for the purposes of prevent the user from having to wait a long time (paragraph 11).

Jijina et al. and Shamoto et al. together do not disclose the GPS receiver is an A-GPS receiver.

Woodard et al. further disclose the GPS receiver can be an A-GPS receiver.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize the teachings of Woodard et al. into the teachings of Jijina et al. and Shamoto et al. for the purposes of enabling Assisted Global positioning system receiver the cellular transceiver to provide augmented wireless 911 location determination to overcome the shortcoming of network-only and GPS-only wireless enhanced 911 location systems (paragraph 28).

Consider claim 24. Jijina et al. also disclose the position cache is configured to store said accuracy data (paragraph 39).

Consider claim 25. Jijina et al. also disclose the processor derives said accuracy data from at least one of a Kalman filter, dilution of precision data, and pseudorange residual data (paragraph 38 and 43).

8. Claim 26 is rejected under 35 U.S.C. 103(a) as being unpatentable over Jijina et al. (US 2004/0203569 A1) in view of Shamoto et al. (US 2003/0045304 A1) and Woodard et al. (US 2005/0200492 A1) as applied to claim 23 and further in view of Bloebaum et al. (US 6,433,735 B1).

Consider claim 26. Jijina et al., Shamoto et al., and Woodard et al. do not disclose a transceiver for receiving a request for a position to be computed within said predetermined time from a server.

Bloebaum et al. further disclose a transceiver for receiving a request for a position to be computed within said predetermined time from a server (col. 7, lines 45-50 and Fig. 7)

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize the teachings of Bloebaum et al. into the teachings of Jijina et al., Shamoto et al., and Woodard et al. for the purposes of determining the geographic location mobile terminal (col. 1, lines 36-60).

Allowable Subject Matter


9. Claims 15-17 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Justin Y. Lee whose telephone number is (571) 272-5258. The examiner can normally be reached on M - F 8:30 to 6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Duc Nguyen can be reached on 571-272-7503. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Justin Lee
AU 2617


DUC NGUYEN
PRIMARY EXAMINER